

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	90	cmos and (space spacing) adj between near2 pixels	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 08:20
L3	177	cmos and distance adj between near2 pixels	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 08:14
L4	56	cmos and distance adj between adj pixels	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 08:14
L5	121	(cmos and distance adj between near2 pixels) not L4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 08:18
L6	102	(cmos and distance adj between near2 pixels and ("mu.m" micrometer\$1)) not L4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 08:18
L7	2	(cmos and distance adj between near2 pixels near5("mu.m" micrometer\$1)) not L4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 08:18
L8	7	cmos and (space spacing) adj between near2 pixels near5("mu.m" micrometer\$1)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 08:24
L9	5	(cmos and (space spacing) near3 pixels near5("mu.m" micrometer\$1)) not l8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 08:34
L10	34	(cmos and (space spacing) distanc\$3) near3 area\$1 near5("mu.m" micrometer\$1))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 08:35
L11	292	(pixel\$1 (image near2 area)) near7 (("8" "8.0" "7" "7.0" "7.5" "8.5") near1 ("mu.m" or micrometer\$1))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/30 09:42
L12	33	348/374.ccls. and ("mu.m" or micrometer\$1)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/30 09:42
S1	1	"5595930".PN. and (micro\$6)	USPAT	OR	OFF	2004/07/07 11:09
S2	350	348/308.ccls.	USPAT	OR	OFF	2004/06/30 07:31
S3	4	lee-do-young.in.	USPAT	OR	OFF	2004/06/23 16:02
S4	588	"20010208".ad.	USPAT	OR	OFF	2004/06/23 15:44
S5	54	"20010208".ad. and Lee	USPAT	OR	OFF	2004/06/23 15:45

S6	16	"20010208".ad. and pixel	USPAT	OR	OFF	2004/06/23 15:46
S7	16	lee-do-young.in.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/23 16:02
S8	490	348/308.ccls.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/23 16:04
S9	45	square near3 photodiode\$2 same area	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/23 16:21
S10	3	("4764682"   "5168338"   "5578815").PN.	USPAT	OR	OFF	2004/06/23 16:11
S11	535	anode SAME ground same cathode same photodiode	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 06:25
S12	7	anode SAME ground same cathode same photodiode same (transfer adj transistor)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 07:02
S13	3	60/182044	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 08:01
S14	19	("3866067"   "3934161"   "4363963"   "4395736"   "4499590"   "4704633"   "4839735"   "4901129"   "4908651"   "5117292"   "5227887"   "5276521"   "5317174"   "5335015"   "5341008"   "5424223"   "5471245"   "5625210"   "5712682").PN.	USPAT	OR	OFF	2004/06/24 07:42
S15	19	("4333111"   "4413284"   "4484210"   "4809075"   "4908518"   "4984047"   "5051797"   "5060245"   "5115458"   "5182623"   "5202907"   "5235196"   "5235198"   "5256891"   "5306931"   "5337340"   "5359213"   "5399889"   "5471515").PN.	USPAT	OR	OFF	2004/06/24 07:51
S16	15	"5,898,168"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 08:22
S17	9	"6,344,877"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 08:22
S18	1	"5614744".PN.	USPAT	OR	OFF	2004/06/24 08:23
S19	74	"5614744".URPN.	USPAT	OR	OFF	2004/06/24 08:26
S20	305	square near3 photodiode\$2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 06:55

S21	147	"5625210"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 08:49
S22	1	square adj image adj sensing adj area	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 08:50
S23	1	"5471515".PN.	USPAT	OR	OFF	2004/06/24 08:51
S24	1	"5323052".PN.	USPAT	OR	OFF	2004/06/24 08:55
S25	1	"5262871".PN.	USPAT	OR	OFF	2004/06/24 08:58
S26	1	"5369039".PN.	USPAT	OR	OFF	2004/06/24 08:59
S27	32	square adj image adj area	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 14:54
S28	1	"5541402".PN.	USPAT	OR	OFF	2004/06/24 09:04
S29	1	"5576763".PN.	USPAT	OR	OFF	2004/06/24 09:05
S30	1	"5757045".PN.	USPAT	OR	OFF	2004/06/24 09:05
S31	1	"5708263".PN.	USPAT	OR	OFF	2004/06/24 09:05
S32	1	"5689208".PN.	USPAT	OR	OFF	2004/06/24 09:05
S33	1	"5625210".PN.	USPAT	OR	OFF	2004/06/24 09:05
S34	1	"4602289".PN.	USPAT	OR	OFF	2004/06/24 09:52
S35	1	"4012587".PN.	USPAT	OR	OFF	2004/06/24 09:53
S36	1	"4336556".PN.	USPAT	OR	OFF	2004/06/24 09:54
S37	1	"5144447".PN.	USPAT	OR	OFF	2004/06/24 09:56
S38	1	"6538693".PN.	USPAT	OR	OFF	2004/06/24 09:56
S39	1	"6566723".PN.	USPAT	OR	OFF	2004/06/24 09:57
S40	7	("4651001"   "5605847"   "6184945"   "6211553"   "6335770"   "6342935"   "6344885").PN.	USPAT	OR	OFF	2004/06/24 09:59
S41	0	"932 320 A2"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 12:19
S42	1	"932320 A2"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 12:21
S43	0	"9920052.1"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 12:20
S44	0	"99200052.1"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 12:20
S45	0	"932 320 A2"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 12:20

S46	1	"932302 A2"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 12:34
S47	0	"6522356".pn. and micro\$5	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 12:34
S48	0	"6522356".pn. and micro\$8	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 12:34
S49	0	"6522356".pn. and (lens\$4)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 12:56
S50	1	"6522356".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 12:58
S51	1	("6522356".pn. EP000932302A2) and scan\$7	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 16:17
S52	0	("6522356".pn. EP000932302A2) and reset\$7	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 16:17
S53	0	"6522356".pn. and reset\$7	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 16:21
S54	1	"5898168".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/24 16:21
S55	12	("4392152"   "5270573"   "5313095"   "5397905"   "5459350"   "5479050"   "5491360"   "5563441"   "5598038"   "5661342"   "5704593"   "5767573").PN.	USPAT	OR	OFF	2004/06/28 09:47
S56	0	photodiode\$2 and "sides near7 positioned"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 11:16
S57	0	CMOS and "sides near7 positioned"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 11:16
S58	574	CMOS and (sides near7 positioned)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 11:16
S59	75	CMOS and (sides near7 positioned) and photodiode	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 11:16
S60	53	CMOS and (sides near7 positioned) and photodiode and transistor\$2	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 11:31

S61	22	("5471515"   "5587596"   "5608243"   "5625210"   "5631704"   "5721425"   "5760458"   "5789774"   "5838650"   "5841159"   "5841176"   "5847422"   "5859450"   "5892253"   "5970316"   "5995163"   "6005619"   "6008486"   "6051447"   "6160281"   "6160282"   "6259124").PN.	USPAT	OR	OFF	2004/06/28 11:19
S62	3	CMOS and photodiode and transistor\$2 adj layout	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 11:32
S63	186	crosstalk and MTF	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 11:32
S64	38	(US-6522356-\$ or US-6753912-\$ or US-6654057-\$ or US-6650369-\$ or US-5796481-\$ or US-6707497-\$ or US-6197503-\$ or US-5119183-\$ or US-5519497-\$ or US-4594514-\$ or US-4697280-\$ or US-4080723-\$ or US-4764682-\$ or US-5625210-\$ or US-6097022-\$ or US-5471515-\$ or US-5614744-\$ or US-6002123-\$ or US-6309075-\$ or US-5904493-\$ or US-4602289-\$ or US-6211553-\$ or US-6184945-\$ or US-6242801-\$ or US-6124595-\$ or US-6084669-\$). did. or (US-6069651-\$ or US-6066846-\$ or US-5903016-\$ or US-5719414-\$ or US-5608451-\$ or US-5543868-\$ or US-5394005-\$ or US-6259124-\$ or US-6366365-\$ or US-6363046-\$).did. or (US-20020008767-\$).did. or (EP-932302-\$).did.	US-PGPUB; USPAT; EPO	OR	OFF	2004/06/28 11:45

S65	3	((US-6522356-\$ or US-6753912-\$ or US-6654057-\$ or US-6650369-\$ or US-5796481-\$ or US-6707497-\$ or US-6197503-\$ or US-5119183-\$ or US-5519497-\$ or US-4594514-\$ or US-4697280-\$ or US-4080723-\$ or US-4764682-\$ or US-5625210-\$ or US-6097022-\$ or US-5471515-\$ or US-5614744-\$ or US-6002123-\$ or US-6309075-\$ or US-5904493-\$ or US-4602289-\$ or US-6211553-\$ or US-6184945-\$ or US-6242801-\$ or US-6124595-\$ or US-6084669-\$). did. or (US-6069651-\$ or US-6066846-\$ or US-5903016-\$ or US-5719414-\$ or US-5608451-\$ or US-5543868-\$ or US-5394005-\$ or US-6259124-\$ or US-6366365-\$ or US-6363046-\$).did. or (US-20020008767-\$).did. or (EP-932302-\$).did.) and MTF and crosstalk	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 11:46
S66	5	((US-6522356-\$ or US-6753912-\$ or US-6654057-\$ or US-6650369-\$ or US-5796481-\$ or US-6707497-\$ or US-6197503-\$ or US-5119183-\$ or US-5519497-\$ or US-4594514-\$ or US-4697280-\$ or US-4080723-\$ or US-4764682-\$ or US-5625210-\$ or US-6097022-\$ or US-5471515-\$ or US-5614744-\$ or US-6002123-\$ or US-6309075-\$ or US-5904493-\$ or US-4602289-\$ or US-6211553-\$ or US-6184945-\$ or US-6242801-\$ or US-6124595-\$ or US-6084669-\$). did. or (US-6069651-\$ or US-6066846-\$ or US-5903016-\$ or US-5719414-\$ or US-5608451-\$ or US-5543868-\$ or US-5394005-\$ or US-6259124-\$ or US-6366365-\$ or US-6363046-\$).did. or (US-20020008767-\$).did. or (EP-932302-\$).did.) and MTF	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 11:47

S67	6	((US-6522356-\$ or US-6753912-\$ or US-6654057-\$ or US-6650369-\$ or US-5796481-\$ or US-6707497-\$ or US-6197503-\$ or US-5119183-\$ or US-5519497-\$ or US-4594514-\$ or US-4697280-\$ or US-4080723-\$ or US-4764682-\$ or US-5625210-\$ or US-6097022-\$ or US-5471515-\$ or US-5614744-\$ or US-6002123-\$ or US-6309075-\$ or US-5904493-\$ or US-4602289-\$ or US-6211553-\$ or US-6184945-\$ or US-6242801-\$ or US-6124595-\$ or US-6084669-\$). did. or (US-6069651-\$ or US-6066846-\$ or US-5903016-\$ or US-5719414-\$ or US-5608451-\$ or US-5543868-\$ or US-5394005-\$ or US-6259124-\$ or US-6366365-\$ or US-6363046-\$).did. or (US-20020008767-\$).did. or (EP-932302-\$).did.) and crosstalk	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 12:01
S68	10	("5434619"   "5493423"   "5793423"   "5898168"   "5933190"   "5962844"   "6097022"   "6115066"   "6166767"   "6344877").PN.	USPAT	OR	OFF	2004/06/28 11:51
S69	1	"6002123".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 12:13
S70	34	photodiode and reset and transfer and source and crosstalk and fill	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 12:32
S71	1	"6633334"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 12:37
S72	16	("4835404"   "4879470"   "4967067"   "4972243"   "5162912"   "5184006"   "RE34309"   "5262870"   "5539196"   "5693932"   "5714752"   "5955753"   "6094220"   "6160281"   "6352869"   "6423994").PN.	USPAT	OR	OFF	2004/06/28 12:32
S73	1	Mendis and cmos and crosstalk and (fill adj factor)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 12:57
S74	9	"6002123"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 12:57
S75	3	("5841126"   "5898168"   "5900623").PN.	USPAT	OR	OFF	2004/06/28 12:59

S76	42	(US-6522356-\$ or US-6753912-\$ or US-6654057-\$ or US-6650369-\$ or US-5796481-\$ or US-6707497-\$ or US-6197503-\$ or US-5119183-\$ or US-5519497-\$ or US-4594514-\$ or US-4697280-\$ or US-4080723-\$ or US-4764682-\$ or US-5625210-\$ or US-6097022-\$ or US-5471515-\$ or US-5614744-\$ or US-6002123-\$ or US-6309075-\$ or US-5904493-\$ or US-4602289-\$ or US-6211553-\$ or US-6184945-\$ or US-6242801-\$ or US-6124595-\$ or US-6084669-\$). did. or (US-6069651-\$ or US-6066846-\$ or US-5903016-\$ or US-5719414-\$ or US-5608451-\$ or US-5543868-\$ or US-5394005-\$ or US-6259124-\$ or US-6366365-\$ or US-6363046-\$ or US-5962844-\$ or US-5793423-\$ or US-5898168-\$ or US-6633334-\$).did. or (US-20020008767-\$).did. or (EP-932302-\$).did.	US-PGPUB; USPAT; EPO	OR	OFF	2004/06/28 13:54
S77	48	cmos and micro\$5 and (square near7 photodiode)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 15:01
S78	5	("4677453"   "4901129"   "5479049"   "5705837"   "5920092").PN.	USPAT	OR	OFF	2004/06/28 14:47
S79	0	square adj2( image adj area near4 sensing)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 14:56
S80	8	(square adj2 image adj area) and CMOS	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 14:56
S81	38	cmos and micro\$5 adj len\$3 and hemispher\$7	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 15:04
S82	29	cmos and (microlen\$3 and hemispher\$7)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 15:09



S83	71	("3234394"   "3723805"   "4125862"   "4152724"   "4191967"   "4204230"   "4240727"   "4463380"   "4518898"   "4549208"   "4554585"   "4574311"   "4602289"   "4661855"   "4670648"   "4683498"   "4720746"   "4728839"   "4736436"   "4740839"   "4751660"   "4752831"   "4757384"   "4772942"   "4797562"   "4797942"   "4807158"   "4819070"   "4835532"   "4837429"   "4843475"   "4858002"   "4858014"   "4858149"   "4877959"   "4882478"   "4893025"   "4899293"   "4918473"   "4924094"   "4928174"   "4942473"   "4945367"   "4965844"   "4991020"   "5005083"   "5019912"   "5020114"   "5023725"   "5043817"   "5048102"   "5057923"   "5067019"   "5068735"   "5077609"   "5107122"   "5140395"   "5173948"   "5175808"   "5185667"   "5200818"   "5231673"   "5243433"   "5276519"   "5276521"   "5313306"   "5359363"   "5396583"   "5428390"   "5489940"   "5905530").PN.	USPAT	OR	OFF	2004/06/28 15:07
S84	84	microlen\$3 near7 fill	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 15:29
S85	18	(microlen\$3 near7 fill) and hemispher\$7	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 15:35
S86	15	((micro adj len\$3) near7 fill) and hemispher\$7	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 15:40
S87	172	((micro adj len\$3)) and hemispher\$7	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 16:05
S88	2	"5595930" and hemispher\$7	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/28 16:05
S89	5260	(cross adj talk) and optim\$5	USPAT	OR	OFF	2004/06/28 16:48
S90	164	(cross adj talk) near7 optim\$5	USPAT	OR	OFF	2004/06/28 17:04
S91	25	(cross adj talk) near7 optim\$5 and sensor\$2	USPAT	OR	OFF	2004/06/28 17:04
S92	4	("5043582"   "5619033"   "6054746"   "6288435").PN.	USPAT	OR	OFF	2004/06/28 17:06

S93	14	("4670765"   "4672454"   "4675739"   "4785186"   "5017989"   "5079426"   "5117114"   "5164809"   "5235195"   "5319206"   "5381014"   "5396072"   "5420452"   "5516712").PN.	USPAT	OR	OFF	2004/06/28 17:11
S94	5	(square near3 active) same photodiode	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 06:58
S95	13	(square near3 (active adj sensing)) and photodiode	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 07:02
S96	0	(square near3 (active adj sensing)) and photodiode	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 07:02
S97	4	(square near3 (image adj sensing)) and photodiode	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 07:25
S98	293	fossum and square	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 07:25
S99	160	fossum and square and cmos	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 07:28
S10 0	60	photodiode and (floating adj node)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 08:15
S10 1	17	("5012344"   "5471515"   "5587596"   "5608243"   "5625210"   "5631704"   "5698844"   "5721425"   "5760458"   "5786623"   "5789774"   "5838650"   "5847422"   "5872371"   "6150704"   "6184516"   "6466266").PN.	USPAT	OR	OFF	2004/06/29 07:59
S10 2	17	(photodiode or (photo adj diode)) and (floating adj node) and square	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 08:45
S10 3	16	(photodiode or (photo adj diode)) and (floating adj node) and square and transfer	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 09:08
S10 4	189	pinned adj photodiode	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 09:29
S10 5	148	"5625210"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 09:11
S10 6	51	(pinned adj photodiode) and square	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 10:59

S10 7	3	("4282535"   "5847836"   "5956051").PN.	USPAT	OR	OFF	2004/06/29 09:49
S10 8	29	"5986297" and cross\$5	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 11:17
S10 9	1	"6633334" and cross\$5	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 12:37
S11 0	410	pixel and reduce near2 distance	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 12:38
S11 1	410	pixel and (reduce near2 distance)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 12:38
S11 2	200	pixel and (reduce near2 distance near2 between)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 12:39
S11 3	32	pixel SAME (reduce near2 distance near2 between)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 12:42
S11 4	432	pixel SAME (increase near2 density)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:23
S11 5	72	pixel SAME (increase near2 density) and (mos cmos)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:24
S11 6	899	pixel SAME (distance same image) and (mos cmos)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:24
S11 7	599	pixel SAME (distance WITH (image imaging)) and (mos cmos)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:25
S11 8	34	pixel SAME (distance WITH (image imaging)) same (reduce decrease) and (mos cmos)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:35
S11 9	390	square near2 (photodiode (photo adj sensitive) photosensitive)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:39
S12 0	39	square near2 (photodiode (photo adj sensitive) photosensitive) with area	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:43
S12 1	2813	fill adj factor	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:43
S12 2	449	(fill adj factor) and photodiode	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:46

S12 3	520051	distance adj between (image adj sensing)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:47
S12 4	27	distance adj between adj (image adj sensing)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:49
S12 5	483	distance adj between adj (photosensitive)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:49
S12 6	23	(distance adj between adj (photosensitive)) and (photodiode photogate)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:53
S12 7	11544	resolution and (photodiode photogate)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:54
S12 8	212	increased adj resolution and (photodiode photogate)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:56
S12 9	119	increased adj resolution and (photodiode photogate) and (square rectang\$4)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 16:56
S13 0	18	increased adj resolution and (photodiode photogate) SAME (square rectang\$4)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 17:10
S13 1	5126	(increas\$3 decreas\$3) and (photodiode photogate photosensitive) SAME (square rectang\$4)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 17:11
S13 2	220	(increas\$3 decreas\$3) WITH (photodiode photogate photosensitive) SAME (square rectang\$4)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 17:11
S13 3	15	(increas\$3 decreas\$3) WITH (photodiode photogate photosensitive) SAME (square rectang\$4) with pixel	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 17:18
S13 4	7	(increas\$3 decreas\$3) WITH (square rectang\$4) with pixel adj density	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/29 17:18
S13 5	355	distance adj between adj pixels	USPAT	OR	OFF	2004/06/30 07:38
S13 6	0	reduce near2 distance adj between adj pixels	USPAT	OR	OFF	2004/06/30 07:39
S13 7	1	reduces near2 distance adj between adj pixels	USPAT	OR	OFF	2004/06/30 07:40
S13 8	5	reduce\$2 near2 (distance adj between adj pixels)	USPAT	OR	OFF	2004/06/30 07:42
S13 9	541	"257"/\$.ccls. and (reduce\$2 near2 (distance adj between ))	USPAT	OR	OFF	2004/06/30 07:43

S14 0	2	"257"/\$.ccls. and (reduce\$2 near2 (distance adj between) with (pixels sensing))	USPAT	OR	OFF	2004/06/30 07:47
S14 1	573	"257"/\$.ccls. and (optimize\$2 with (distance spac\$4))	USPAT	OR	OFF	2004/06/30 07:48
S14 2	148	"257"/\$.ccls. and (optimize\$2 near2 (distance spac\$4))	USPAT	OR	OFF	2004/06/30 07:49
S14 3	12	"257"/\$.ccls. and (optimize\$2 near2 (distance spac\$4)) and (crosstalk cross-talk)	USPAT	OR	OFF	2004/06/30 08:01
S14 4	2657	"257"/\$.ccls. and (crosstalk cross-talk)	USPAT	OR	OFF	2004/06/30 08:01
S14 5	90	("257"/\$.ccls. "348"/\$.ccls.) and ((crosstalk cross-talk) same (photosensor sensing))	USPAT	OR	OFF	2004/06/30 09:32
S14 6	49	("257"/\$.ccls. "348"/\$.ccls.) and ((crosstalk cross-talk) same (photosensor sensing)) and (distance proximity)	USPAT	OR	OFF	2004/06/30 09:44
S14 7	7	("4667092"   "5032718"   "5311337"   "5535028"   "5744826"   "5759078"   "5818052").PN.	USPAT	OR	OFF	2004/06/30 09:38
S14 8	113	pixel adj (geometry)	USPAT	OR	OFF	2004/06/30 14:33
S14 9	16	(pixel adj (geometry)) and (fill adj factor)	USPAT	OR	OFF	2004/06/30 10:26
S15 0	11	"5595930"	USPAT	OR	OFF	2004/06/30 10:29
S15 1	34	"5904493"	USPAT	OR	OFF	2004/06/30 10:29
S15 2	1	"5904493".pn.	USPAT	OR	OFF	2004/06/30 13:56
S15 3	48	guidash and kodak	USPAT	OR	OFF	2004/06/30 13:56
S15 4	2	guidash and kodak and MTF	USPAT	OR	OFF	2004/06/30 14:51
S15 5	47	crosstalk and pixel and MTF	USPAT	OR	OFF	2004/06/30 14:33
S15 6	81	crosstalk and pixel and MTF	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/30 14:53
S15 7	3	guidash and kodak and MTF	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/30 14:51
S15 8	18	crosstalk SAME ((image adj sens\$4) (photosens\$4)) SAME MTF	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/30 14:57

S15 9	390	((image adj sens\$4) (photosens\$4)) SAME MTF	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/30 14:58
S16 0	19	("4373167"   "4467341"   "4696021"   "4928158"   "4958207"   "4977584"   "5028970"   "5235197"   "5479049"   "5493143"   "5631704"   "5739548"   "5789774"   "5841158"   "5867215"   "5880495"   "5892253"   "5977576"   "5986297").PN.	USPAT	OR	OFF	2004/06/30 15:10
S16 1	21	"5986297".URPN.	USPAT	OR	OFF	2004/06/30 15:11
S16 2	1	"5986297".URPN. and (MTF crosstalk)	USPAT	OR	OFF	2004/07/06 16:41
S16 3	2	"6492848"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2004/06/30 16:17
S16 4	20	"5986297".URPN. and (MTF crosstalk cmos)	USPAT	OR	OFF	2004/07/06 16:41
S16 5	1	"5986297".PN. and (MTF crosstalk cmos)	USPAT	OR	OFF	2004/07/07 07:56
S16 6	1	"6633334".PN. and (MTF crosstalk cmos)	USPAT	OR	OFF	2004/07/07 07:44
S16 7	0	"6633334".PN. and (lens\$3)	USPAT	OR	OFF	2004/07/07 07:44
S16 8	0	"6633334".PN. and (micro\$6)	USPAT	OR	OFF	2004/07/07 11:09
S16 9	1	"5986297".PN. and (array)	USPAT	OR	OFF	2004/07/07 07:56
S17 0	0	"6633334".PN. and (acive)	USPAT	OR	OFF	2004/07/07 08:14
S17 1	1	"6633334".PN. and (active)	USPAT	OR	OFF	2004/07/07 08:15
S17 2	352	pixel\$1 same (micrometer\$1 near1 ( "3" "4" "5" "6" "7" "8" "9" "10"))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/28 14:49
S17 3	0	pixel\$1 same (meter\$1 near1 ( " 00003" "0.00004" "0.00005" "0.00006" "0.00007" "0.00008" "0.00009" "0.00010 .0001" "0.00003" "0.00004" "0. 00005" "0.00006" "0.00007" "0. 00008" "0.00009" "0.00010 0. 0001"))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/28 12:45
S17 4	117	348/315.ccls.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/28 14:42

S17 5	3	348/315.ccls. and micrometer\$1	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/28 14:42
S17 6	0	pixel\$1 same (".mu.m" near1 ( "3" "4" "5" "6" "7" "8" "9" "10"))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/28 14:50
S17 7	4362	pixel\$1 same (( "3" "4" "5" "6" "7" "8" "9" "10") near1 "mu.m")	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/28 14:50
S17 8	1771	pixel\$1 near7 (( "3" "4" "5" "6" "7" "8" "9" "10") near1 "mu.m")	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/28 14:50
S17 9	250	pixel\$1 near7 (( "3.8" "4") near1 "mu.m")	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 12:28
S18 0	149	pixel\$1 near7 (( "3.8" "4" "5" "3") near1 "mu.m") near7 (distance adjacent space\$1)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 12:30
S18 1	9	CMOS and pixel\$1 near7 (( "3.8" "4" "5" "3") near1 "mu.m") near7 (distance adjacent space\$1)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 12:48
S18 2	149	pixel\$1 near7 (( "3.8" "4" "5" "3") near1 "mu.m") near7 (distance adjacent space\$1)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 13:19
S18 3	138	pixel\$1 near7 (("8") near1 ("mu.m" or micrometer\$1))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/30 08:43
S18 4	11	cmos and (pixel\$1 near7 (("8") near1 ("mu.m" or micrometer\$1)))	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 14:45
S18 5	3	(depletion adj mode adj transistor) near7 reset	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 14:48
S18 6	21	(depletion adj mode adj transistor) same reset	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 15:36
S18 7	0	("8" adj "x" adj "8" adj "mu.m") and pixel	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 15:34
S18 8	18	"8x8" near7 pixel	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 15:35
S18 9	106	(depletion adj mode) same reset	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 15:36
S19 0	32	(depletion adj mode) same reset and pixel\$1	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 16:16

S19 1	32	(depletion adj mode) same reset and pixel\$1	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 16:16
S19 2	16	((depletion adj mode) same reset and cmos) not S191	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 16:55
S19 3	413	"6687"	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/29 16:55
S19 4	414	"6687"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 16:58
S19 5	17	"6687" and kr	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 16:55
S19 6	39	"6687" and yang	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 16:56
S19 7	1062	hyundai.as. and yang.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 17:00
S19 8	18	hyundai.as. and yang.in. and cmos	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:42
S19 9	11	woodward.in. near1 yang.in. and cmos	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:45
S20 0	171	"5625210"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:45
S20 1	2	"5625210".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:46
S20 2	0	"5625210".pn. and depletion	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:46
S20 3	1	"5625210".pn. and reset	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:46



S20 4	0	"5040040".pn. and reset	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:47
S20 5	0	distance same (image adj sensing) same (micrometers ".mu.m") and (cmos pixel\$1 array)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:49
S20 6	0	spacing same (image adj sensing) same (micrometers ".mu.m") and (cmos pixel\$1 array)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:49
S20 7	1345	spacing same (micrometers ".mu. m") and (cmos pixel\$1 array)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:49
S20 8	2369	distance same (micrometers ".mu. m") and (cmos pixel\$1 array)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:49
S20 9	1441	distance same (micrometers ".mu. m") same between and (cmos pixel\$1 array)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/29 18:49
S21 0	367	distance same (micrometers ".mu. m") near4 between and (cmos pixel\$1 array)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 06:05
S21 1	0	yang and "800" near2 "600" adj cmos adj imaging adj system	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 06:06
S21 2	5	yang and integrated adj4 (cmos adj imaging adj system)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 06:42
S21 3	680	distance adj between adj pixels	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 06:43
S21 4	56	cmos and distance adj between adj pixels	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/03/30 08:14